

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

1. (Currently Amended) A semiconductor device including a gate having a gate insulation film and a gate electrode, a source, and a drain, said semiconductor device comprising:
 - a sidewall film covering contacting a side surface of said gate; and
 - a low permittivity region locally provided at a lower portion of the side surface of said gate with the low permittivity region being covered by said sidewall film,
 - wherein said gate insulation film and a lower end of said gate electrode have a same width as each other;
 - wherein said low permittivity region is made of a lower permittivity material as compared to said sidewall film;
 - wherein said low permittivity region is less than 40 nm in height and width;
 - wherein said sidewall film includes;
 - a first film directly formed at an upper portion of said side surface of said gate, and
 - a second film formed on said first film to directly contact said low permittivity region directly formed at the lower portion of the side surface of said gate;
 - wherein said gate electrode has a nearly rectangular shaped section.
- 2-12. (Cancelled).
13. (Currently Amended) A semiconductor device including a gate having a gate insulation film and a gate electrode, a source, and a drain, said semiconductor device comprising:

a sidewall film contacting a side surface of said gate; and a low permittivity region locally provided at a lower portion of the side surface of said gate with the low permittivity region being covered by said sidewall film,

wherein said gate insulation film and a lower end of said gate electrode have a same width as each other;

wherein said low permittivity region is a cavity;

wherein said cavity is less than 40 nm in height and width;

wherein said sidewall film includes

a first film directly formed only at an upper portion of said side surface of said gate, and

a third film covering said first film, to form the cavity only at a lower portion of said side surface, said cavity formed to directly contact a lower portion of said gate; and

wherein said gate electrode has a nearly rectangular shaped section.

14. (Currently Amended) A semiconductor device including a gate having a gate insulation film and a gate electrode, a source, and a drain, said semiconductor device comprising:

a sidewall film contacting a side surface of said gate; and

a low permittivity region locally provided at a lower portion of the side surface of said gate with the low permittivity region being covered by said sidewall film,

wherein said low permittivity region is less than 40 nm in height and width;

wherein said gate insulation film and a lower end of said gate electrode have a same width as each other;

wherein a part of a side wall lower portion of said gate is removed to have said low permittivity region formed into a notched shape.

15. (Previously Presented) The semiconductor device according to claim 14, wherein said low permittivity region is made of a lower permittivity material as compared to said sidewall film.

16. (Previously Presented) The semiconductor device according to claim 14, wherein said low permittivity region is a cavity.